

REMARKS

Reconsideration of the application is requested in view of the modifications above the remarks below. Claim 1 has been amended to indicate specific amounts of components, as supported by the specification at page 6, lines 15-22.

1. Rejection Under 35 USC 103

Claims 1-12 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Pat. No. 4,079,028 to Emmons et al. (hereinafter "Emmons"). The rejection should be withdrawn.

It is well settled that to establish a *prima facie* case of obviousness, the USPTO must satisfy all of the following requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine references. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification must have had a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in the art at the time the invention was made. *Amgen v. Chugai Pharmaceutical Co.* 18 USPQ 2d 1016, 1023 (Fed Cir, 1991), *cert. denied* 502 U.S. 856 (1991). Third, the prior art reference or combination of references must teach or suggest all of the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496, (CCPA 1970).

Applicants' invention relates to a water-soluble or water-dispersible polyurethane comprising a reaction product of

- A) a mixture of at least one polyether polyol a1) having an average functionality of ≥ 3 and at least one urethane group-containing polyether polyol a2) having an average functionality of ≥ 4 ,
- B) at least one C₈-C₂₂ monoisocyanate,
- C) at least one (cyclo)aliphatic and/or aromatic diisocyanate,
- D) optionally at least one C₈-C₂₂ monoalcohol, and
- E) optionally at least one polyisocyanate having an average functionality of >2 .

Component C) comprises isophorone diisocyanate and the starting NCO/OH

equivalent ratio is between 0.5:1 to 1.2:1 and the polyurethane has a softening point of from 10°C to 80°C. Applicants have specifically indicated that the polyether alcohol mixture A) containing polyether a1) and the urethane group-containing polyether a2) is carried out by the partial reaction of the polyethers a1) with at least one organic isocyanate having a functionality of ≥ 2 and up to 50 mole % of the polyethers a1) are reacted with isocyanates.

Emmons teaches latex and other aqueous systems thickened by incorporation of a low molecular weight polyurethane characterized by at least three hydrophobic groups interconnected by hydrophilic polyether groups. The thickeners are prepared at 60°C in a solvent (toluene). At the end of the reaction, the product is isolated by evaporation.

Emmons teaches polymeric compounds in which the isocyanate-reactive component is used at an equivalent stoichiometric amount or at a stoichiometric excess. Emmons only provides a general disclosure of organic polyisocyanates and a laundry list that does not include IPOI.

One of ordinary skill in the art following Emmons would not have been motivated to modify Emmons and make Applicants' invention.

Emmons's teachings related to latex and other aqueous systems thickened by incorporation of a low molecular weight polyurethane would not have motivated one of ordinary skill in the art to modify Emmons and make or practice Applicants' invention. The teachings of Emmons lack the suggestive details required by 35 USC 103 and simply teach a different process from that Applicants are claiming. Reconsideration is requested.

Emmons, coupled with the knowledge generally available in the art at the time of the invention, does not contain some suggestion or incentive that would have motivated the skilled artisan to modify a Emmons as alleged in the Office Action. The proposed modification would not have had a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in the art at the time the invention was made. Emmons does not teach or suggest all of the limitations of the rejected claims. Reconsideration is requested.

Rejections under obviousness-type double patenting


Claims 1-12 are rejected under the judicially created doctrine of obviousness-type double patenting over Claims 1-12 of U.S. Pat. No. 6,642,302. Claims 1-12 are also provisionally rejected under the judicially created doctrine of obviousness-type double patenting over Claims 1-12 of U.S.S.N. 10/092212.

Applicants request the Examiner hold these rejections in abeyance until such the present claims are allowed.

In view of the above amendments, Applicants earnestly request the allowance of all Claims.

Respectfully submitted,

By


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